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WAR DIARY

AN AIRMAN'S SECOND LIFE

By "N.Z.R.B."

THE parachute has saved the lives of countless airmen—and no wonder. It is a marvel of construction and efficiency. Only the finest white silk is used, yards and yards of it, triple sewn where the mathematically adjusted pieces meet to be attached to form the main canopy.

I watched one being folded at the Training School at Wereroa, and learned something of this airman's "second life." It must be treated as carefully as a defenceless child, and the utmost care must be taken to prevent it from getting wet. In England, where parachutes are packed for the use of airmen, special sheds are used to overcome the inroads of dust and damp.

Full instructions concerning a parachute, I was told, fill a fat army volume, but those particulars are for the Air Force only. Some details may be given—re-assuring details for those who have relatives in the Air Force.

Only the Finest Materials

First of all, only the finest materials are used. The webbing which attaches the parachute to the airman's body is triple weave and a single thickness has a breaking strength of not less than 2,800 lbs. Hooks are of forged aluminium-nickel-iron-bronze alloy, giving a maximum strength with a minimum of lightness. Yards and yards of pure silk are used in the manufacture of each parachute and in the making of the cords which attach the silk canopy to the webbing. There are 24 of these cords on the general service type, and each must withstand a breaking strain of 200 lbs.

When an airman leaps into space if his machine is damaged, a quick jerk of normal force releases the rip cord which is the beginning of a parachute's opening. Attached to the top of the parachute is a tiny auxiliary one which, by the force of the falling body, opens very rapidly and pulls the large parachute out of its pack. All this happens very rapidly—a matter of seconds—so rapidly, in fact, that the process cannot be accurately observed. Slow motion cameras, taking 100 exposures a second, have been used in an effort to record the process, and experts have concluded from these photographs that under two seconds elapse between the pulling of the rip cord and the full opening of the parachute's canopy.

Meeting the Shock

Science has so designed the airman's parachute that those in present use must be capable of withstanding a shock equal to a weight of 400 lbs. released at an altitude of 1,000 ft. from an airplane travelling at 150 miles an hour. Moreover, as the parachute opens, the shock must not be so great that the airman is injured. In order to prevent

a too sudden jolt, there is a small vent in the top of the parachute through which sufficient air escapes to prevent this.

No Unconsciousness

Until recently it was thought that a man falling some thousands of feet through space became unconscious, but once again science has come to the rescue. Practising and practical airmen have allowed themselves to drop freely for thousands of feet before operating the rip cord and releasing the parachute attached to their bodies. They have recorded that while they fell they were able to think and act with normal rapidity. Such "free drops" are now commonplace. The only thing an airman must guard against in the few seconds at his disposal is that he must be quite free from the machine before he releases the rip cord; otherwise the parachute might become entangled in his wrecked machine. If all goes according to plan he drops slowly to earth controlling the cords to prevent under wobbling and spinning.

Getting Free

Should an airman fall in water or on territory where the parachute might endanger his life, he can rid himself of the whole harness by a sharp blow on what is known as the "quick release box" which is attached to the webbing and is normally low on his chest. This release box is a tiny affair so simple and efficient as not to baffle even the layman. Until the airman gives it a sharp tap, nothing short of dynamite will release it.

Altogether there are five types of parachute for use in both airplanes and balloons. Those used by aviators are attached to the body and, in single-engined landplanes, are fitted into special seats, built to take the parachute packs.

Finally, these great life-savers are not officially known as parachutes—their correct name is the "Irvin air-chute." One of the cadet airman's first duties is to learn how to handle and pack one correctly—a difficult job and one which requires the utmost care, for an airman's life might be jeopardised if one small piece were out of order.

Historical Trondheim

Trondheim, the ancient capital of Norway, is 250 miles north of Oslo by rail, situated at the head of a long and narrow fjord which is difficult to navigate, though the harbour is deep and safe. Since 1818, the kings of Norway have been crowned in the magnificent old cathedral of Trondheim, the most interesting church in Norway, which dates from the 13th Century. The ruins of an ancient archiepiscopal palace, dating from early times, are also famous. Trondheim has a population of 54,135. Because of the danger from fires, building

Personal

Major H. E. Suckling, of Christchurch, has been appointed Assistant Director of Dental Services.

Major H. C. Steere, of the Audit Department, Wellington, has been appointed auditor to the 2nd N.Z.E.F. overseas. Lieut. W. E. Tindill, also of the Audit Department, has been appointed assistant auditor.

Lieut. M. J. Mason, formerly well-known in 'Varsity sporting circles, has been appointed Intelligence Officer to the 25th Battalion, 3rd Echelon, N.Z.E.F.

R. Carey and J. W. Knewstubb, two members of the Port Chalmers Sailing Club, have been accepted for service in the British Navy, and will leave shortly for England. Both yachtsmen are members of the R.N.V.R.

Cedric Howell, of the staff of Sharland & Co., Wellington, will go into camp to train with the non-commissioned officers for the 3rd Echelon.

in wood is now forbidden. The town was founded in 996, and became the most important in early Norway, but its decline dates from the Reformation. At one stage of its history, it was taken by the Swedes after a siege lasting nine weeks. Large quantities of copper ore, herrings, fish-oil, and timber are exported from Trondheim, which is the clearing house for much of Northern Norway.

The Tree-less Faeroes

Now that the Allies have taken over the Faeroe Islands these will probably become a naval base for operations against the enemy. The islands, a group of 22 belong to Denmark and have a population of 24,000. Storms and whirlwinds are frequent, but the winters are mild and foggy and the ports are ice-free. There are no trees on the islands, which rise sharply from the water to a height of 1000 to 2300 feet. Peat and coal are used for fuel, all timber being imported from Norway. Barley is the only cereal. Wild-fowl abound on the islands, and their skins and feathers are among the principal exports, which also include sheep and fish, whale products and guano. The inhabitants, who are descendants of the old Norsemen, have a number of old epics in ballad form which have been of great interest to students of ancient languages. The Faeroe Islands lie midway between the Shetlands and Iceland, and are the remains of an ancient plateau.

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